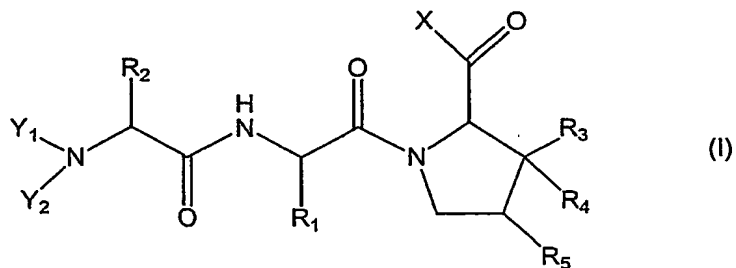


Claims:

1. Use of compounds of the following formula (I):



wherein X represents OH, (C₁₋₅) alkoxy, NH₂, NH-C₁₋₅-alkyl, N(C₁₋₅ alkyl)₂;

R₁ is a residue derived from one of the amino acids Phe, Tyr, Trp, Pro, which each may be optionally substituted with one or more (C₁₋₅) alkoxy groups, (C₁₋₅) alkyl groups or halogen atoms, as well as Ala, Val, Leu or Ile;

R₂ is a residue derived from one of the amino acids Gly, Ala, Ile, Val, Ser, Thr, Leu and Pro;

Y₁ and Y₂ independently from each other represent H or (C₁₋₅) alkyl;

R₃ and R₄ independently from each other represent H, OH, (C₁₋₅) alkyl or (C₁₋₅) alkoxy, provided that R₃ and R₄ are not both OH or (C₁₋₅) alkoxy; and

R₅ represents H, OH, (C₁₋₅) alkyl or (C₁₋₅) alkoxy;

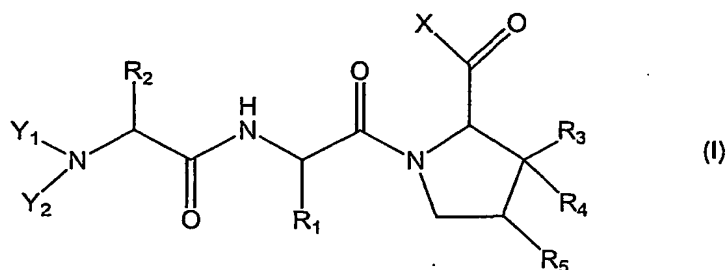
or a pharmaceutically acceptable salt thereof;

for the preparation of a medicament useful in the treatment of neurodegenerative diseases.

2. Use according to claim 1, wherein X represents (C₁₋₅) alkoxy, NH₂, NH-C₁₋₅-alkyl, or N(C₁₋₅ alkyl)₂.
3. Use according to claim 1 or 2, wherein R₃ and R₄ independently from each other represent H, (C₁₋₅) alkyl or (C₁₋₅) alkoxy, provided that R₃ and R₄ are not (C₁₋₅) alkoxy.
4. Use according to any of the previous claims, wherein R₅ represents H, (C₁₋₅) alkyl or (C₁₋₅) alkoxy.
5. Use according to any of the previous claims, wherein the neurodegenerative disease is Alzheimer's disease.
6. Use according to any of the previous claims, wherein the neurodegenerative disease is mild cognitive impairment.
7. Use according to any of the previous claims, wherein R₁ is a residue which is derived from one of the amino acids Phe, Tyr, Trp, each of which may optionally be substituted with a (C₁₋₅) alkoxy group, a (C₁₋₅) alkyl group or a halogen atom or which is derived from Ile.
8. Use according to claim 7, wherein R₁ is a residue which is derived from Phe, which may optionally be substituted with a (C₁₋₅) alkoxy group, a (C₁₋₅) alkyl group or a halogen atom.
9. Use according to any of the previous claims, wherein R₂ is a residue which is derived from the amino acid Gly or Ile.
10. Use according to any of the previous claims, wherein the compound of formula (I) is glycyl-L-phenylalanyl-L-prolineamide, N,N-diethyl-isoleucyl-phenylalanyl-L-proline

ethylamide, N,N-diethyl-isoleucyl-isoleucyl-prolineamide or a pharmaceutically acceptable salt thereof.

11. Pharmaceutical composition comprising compounds of the following formula (I):



wherein X represents OH, (C₁₋₅) alkoxy, NH₂, NH-C₁₋₅-alkyl, N(C₁₋₅ alkyl)₂;

R₁ is a residue derived from one of the amino acids Phe, which may be optionally substituted with one or more (C₁₋₅) alkoxy groups, (C₁₋₅) alkyl groups or halogen atoms;

R₂ is a residue derived from one of the amino acids Gly, Ala, Ile, Val, Ser, Thr, Leu, and Pro;

Y₁ and Y₂ independently from each other represent H or (C₁₋₅) alkyl;

R₃ and R₄ independently from each other represent H, OH, (C₁₋₅) alkyl or (C₁₋₅) alkoxy, provided that R₃ and R₄ are not both OH or (C₁₋₅) alkoxy; and

R₅ represents H, OH, (C₁₋₅) alkyl or (C₁₋₅) alkoxy;

or a pharmaceutically acceptable salt thereof;

and pharmaceutically acceptable excipients.

12. Pharmaceutical composition according to claim 11, wherein X represents (C₁₋₅) alkoxy, NH₂, NH-C₁₋₅ alkyl or N(C₁₋₅ alkyl)₂.

13. Pharmaceutical composition according to claims 11 or 12, wherein R₂ is a residue which is derived from the amino acid Gly.

14. Pharmaceutical composition according to claims 11 to 13, wherein the compound of formula (I) is glycyl-L-phenylalanyl-L-prolineamide, N,N-diethyl-isoleucyl-phenylalanyl-L-proline ethylamide, N,N-diethyl-isoleucyl-isoleucyl-prolineamide or a pharmaceutically acceptable salt thereof.

15. Use of a compound of formula (I) as defined in claim 11 as a drug.